Concurrent substance-related disorders and mental illness: the North American experience

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Ingredients of the evolving North American experience in addressing the management of patients with concurrent substance-related disorders and mental illness are presented. This experience as well as select data from Europe and Australia indicate a growing empirically-based consensus to provide an integrated approach to the care of these patients. It also highlights the necessity to conduct local surveys of needs and resources and adapt the published clinical experience to the local system of care, resources and culture.

Key words: Comorbidities, concurrent disorders, substance abuse, mental illness, integrated treatment

Over the last 20 years, the intricate relationship between substance use and mental disorders has received particular attention (1-3). In most countries of the Western world, the system addressing the needs of the addicted diverged from the system caring for the mentally ill between the 1950s and 1970s. This was not the case in most Eastern European, Asian and African countries. Most of the recent literature on concurrent disorders originates from the countries with separate systems of care (3,4).

In the US, the Epidemiologic Catchment Area (ECA) study found that the lifetime prevalence for any psychiatric disorder was 44% among people with an alcohol disorder and 64.4% among people with other drug-use disorders (5). The National Comorbidity Study (NCS) reported that most mental disorders were more common among persons with a current or lifetime substance use disorder than among those who had never experienced such a problem. Furthermore, most disorders had their onset prior to the onset of the substance use disorder, with the exception of mood disorders among male alcoholics, which usually developed after the onset of alcoholism (6). In Canada, the population study conducted in Edmonton in the 1980s elicited results essentially similar to those of the ECA (7). In the 1990s, the British Psychiatric Morbidity Survey reported general population prevalence rates of 4.7% for alcohol misuse and 2.2% for drug misuse (8). The 1997 Australian National Mental Health Survey reported 12-month prevalence figures of 6% for alcohol abuse/dependence and 3% for drug abuse/dependence (9). Corresponding ECA figures were 7.4% and 3.1% respectively.

In North America, mounting evidence points to the severe medical and social repercussions of concurrent substance-related disorders for severely mentally ill populations, including a high rate of relapse and rehospitalization, depression and suicidality, increased family problems, violence, incarceration, homelessness and human immunodeficiency virus (HIV) infection. Prospective studies showed repeatedly that treatment outcomes are worse among patients with more than one disorder than among those with only one. The increased utilization of expensive hospital and emergency services results in higher treatment costs (4). In Germany and UK, studies addressing the use of resources by patients with schizophrenia have elicited mixed results: some are in support of the North American findings (10-12), others are not (13,14).

People with concurrent substance use and mental disorders attempting to obtain help from separate systems have met a bewildering array of services with contradictory philosophies and approaches. Individuals have faced mislabeling, rejection and automatic transfers and have fallen "between the cracks" of treatment systems. As both mental health and addiction treatment facilities became aware of the special needs of these patients, their attempts to remedy this unsatisfactory situation were conceptualized into three approaches (2): a) sequential treatment (patients are treated by one system and then by the other; which disorders are treated first depends very much on the clinician's orientation); b) parallel treatment (simultaneous involvement of the patient in both mental health and addiction treatment settings; as each setting's staff provide their own orientation and services to the patient, coordination of care is quite variable); c) integrated treatment (providing unified and comprehensive treatment programs for patients with concurrent disorders). Ideally, integrated treatment involves clinicians trained in both mental health and addiction, as well as unified case management to monitor and treat patients through crises arising from either disorder. Early approaches to integrated treatment involved merely adding a substance abuse treatment group to the usual mental health program or providing an intense substance abuse intervention with the goal of rapidly achieving abstinence. Eventually integration resulted in more comprehensive approaches, involving assertive outreach, intensive case management, individual, group and family substance abuse counseling and occasionally hospitalization to a dedicated unit or admission to a residential facility.

Differences in symptom severity and degree of impairment may affect the selection of one of the above models. For example, sequential and parallel treatment may be most appropriate for patients with a severe problem in one disorder but a mild problem with the other. It is noteworthy that, both in North America and in countries where separate systems of care have not evolved, the tendency for mental illness to be treated while neglecting substance use or vice versa still exists. Integrated care is a spreading but still unevenly distributed resource.

RESEARCH ON INTEGRATED TREATMENT

The bulk of research in the US has occurred within the public system involved with the care of the severe and persistently mentally ill. Much less is known about the broader range of mental illness receiving treatment for concurrent disorders in both public and private networks. In 1998, Drake (15) identified 36 completed studies of integrated treatment, dividing them into four categories as per the degree of integration: dual disorders treatment group (4 studies); intensive integrated treatments (9 studies); community support programs (CSP) for young adults with co-occurring disorders (13 studies) and comprehensive integrated dual diagnosis programs (10 studies). Of the 36 studies, 13 used a controlled design and the subjects were mostly individuals suffering from chronic psychosis. Promising orientations identified from both Drake's review and a complementary analysis by RachBeisel et al (16) include a comprehensive harm reduction approach, an assertive outreach and case management strategy, a stage-wise motivational approach, skills training through cognitive behavioral interventions, and a customized pharmacotherapy enhancing efficacy and compliance. The therapeutic management of disability benefits has also been shown to improve outcome.

DESIGNING LEVELS OF CARE FOR SYSTEMS AND PROGRAMS

The current realization is that comorbidity is so common that it should be expected rather than considered an exception. Research from the demonstration projects highlight that outcome depends on the extent to which support at the system level is provided (17). Thus, consensual standards have recently been developed to address managed care needs in the US. Two such examples are a panel report from the Center for Mental Health Services (18) and the American Society of Addiction Medicine (ASAM)'s placement criteria (19). The report from the Center for Mental Health Services conceptualizes five levels of strategic change required for a truly integrated system: a) health authority (building stakeholder consensus; conjoint planning; structural, regulatory, reimbursement/contracting mechanisms; defining standards; demonstration and training initiatives); b) programme leadership (leadership and vision of integration; training; comprehensive integration; records; outcomes and quality assurance); c) clinical/supervisor (outcome-based supervision; new knowledge; new skills; specialty training); d) strategies for family (information; support; collaboration; skills and reinforcement; advocacy); e) strategies for consumer (information; peer discussion; counseling; rehabilitation; new roles in system). A complementary perspective in the ASAM criteria for use of the substance abuse network identifies two levels of program capability in handling individuals with concurrent disorders: a) dual diagnoses capable (DDC) programs (i.e., programs accommodating admissions with somewhat stabilized psychiatric disorders and with a primary focus on the treatment of substance-related disorders); b) dual diagnoses enhanced (DDE) programs (i.e., programs accommodating more unstable or disabled psychiatric admissions short of requiring 24 hours supervision).

CLINICAL OPPORTUNITIES FROM CROSS-FERTILIZATION

As both addictions and mental health treatment systems in North America have matured independently over the years, their recent collaboration in the treatment of concurrent disorders is presenting new skills development opportunities for both fields. Select examples follow.

From the addiction field

The change cycle. Individuals with concurrent disorders are recognized as particularly non-compliant and resistant to change. Prochaska and DiClemente's change cycle based on the experience with smoking cessation is now increasingly accepted within the mental health field as a leading concept to assess and monitor motivation. This framework underpins the specific engagement and persuasion strategies required to enlist the individual with concurrent disorders into treatment as described in the motivation-based treatment model for the severe and persistently mentally ill (20).

Relapse prevention. Relapse prevention strategies have been developed to promote and maintain abstinence from substances (21). These simple, repetitive exercises are now a basic tool utilized in many programs addressing most psychiatric disorders with a high prevalence of relapses.

From harm reduction to abstinence. In the early stages of alcohol abuse, "sensible drinking" techniques may be taught successfully. The upper limits of moderate drinking for a person suffering from mental disorder will, in general, be lower than for the general population. Methadone maintenance is also a demonstrated stabilizing factor for opiate-dependent individuals with concurrent disorders. The achievement of sobriety/abstinence for most substance dependent individuals is a cornerstone to recovery. The need to cast a wider supportive net to those for whom

abstinence is a foreboding objective is also acknowledged. For many people with mental illness, the initial engagement and persuasion strategies involve a harm reduction approach. Increased awareness of the impact of substance use has spurred the mental health field to pay particular attention to the use of substances as part of each admission's assessment and treatment plan. This increased scrutiny is now including the impact of smoking among mentally ill populations. The past pessimistic attitude regarding the outcome of cessation strategies in this group is being replaced by a more accurate awareness of the possibilities arising from tailoring cessation strategies to these particularly vulnerable diagnostic groups (22).

Roles of self-help and spirituality in recovery. The achievements of the fellowship of Alcoholics Anonymous and other self-help networks have contributed to the resurrection of the value of spirituality in the eyes of the mental health system. A supportive gradual introduction to a Twelve Step process as well as the help of a sponsor is now featured in most programs for concurrent disorders.

From the mental health field

The significance of valid diagnoses. The mental health field has developed an ever-increasing sophistication in differential diagnosis. This sophistication is required to be able to differentiate between temporary psychiatric symptoms commonly occurring during early recovery and valid comorbidities requiring systematic treatment.

The benefits and limitations of psychotherapy. The practice of individual insight-oriented psychotherapy was undervalued in the addiction field ever since the poor outcome of traditional analytical psychotherapy in this population was demonstrated in the late 1960s. The practice of psychotherapy for substance abusers has markedly matured since then. An initial focus on sobriety/abstinence is now considered a prerequisite prior to engaging the individual in insight-oriented psychotherapy. Cognitive-behavioral therapeutic approaches have made great strides in the field and lend themselves more readily to outcome evaluation. The development of innovative techniques such as network therapy as well as the development of manuals to support the individual in early recovery attest to the creative potential of psychotherapy in adapting to the needs of the addicted population (23-26).

The optimal group membership mix. Different diagnoses and functional activities result in heterogeneous interactive and coping skills. Familiarity with heterogeneous problems and levels of interactive functioning has also resulted in the mental health system developing expertise with optimal membership size and mix as well as tailored group therapy processes. The optimal group will consist of members who have a more or less equal predictive chance to participate in the activities and influence the group process therapeutically (27).

The benefits and limitations of pharmacotherapy. A common experience in addiction is the switch of dependence from a substance to prescribed medications such as benzodiazepines and hypnotics. The problem of prescription abuse – particularly among females, the elderly and aboriginal populations – has rendered that field leery of psychotropic medication often based on misinformation and misperception. This prejudice is unfortunately compounded by the dearth of good pharmacological trials among comorbid populations. Substance abuse/dependence remains an exclusion criterion in most clinical trials. Individuals with a psychiatric comorbidity require an adequate trial of medication involving the right drug, the right dose and the right duration. There is a risk of under-medication and at the same time frequent re-evaluations of the prescription are required, particularly when combined medications are involved. Aside from the risk of dependence, another guide to the selection of a medication is its adverse effect profile. The patient exposed to the adverse effects of substance abuse is particularly sensitive to the adverse effects of a psychotropic medication, contributing to non-compliance. Pioneering anticraving medication, such as naltrexone and acamprosate, now add a new dimension to our pharmacotherapy and seem to be well-tolerated by comorbid populations.

DESIGNING A CONCURRENT DISORDERS PROGRAM: A STEPWISE APPROACH

The following recommendations are based on our 15 years' experience in designing a program in Calgary, a mid-sized city of Western Canada (population of about one million). We monitored the extensive experience in the US, largely based on the needs of the severely mentally ill segment of the population and a managed care strategy, and adapted it to Canada's more comprehensive medicare.

Needs and resources assessment

A local needs survey must be conducted to gather prevalence and clinical impact data. Differences in study settings, methods of assessment, definitions of substance use disorders and the clinical and sociodemographic characteristics of samples account for wide variations. A simplistic extrapolation from current literature data to the local scene can be misleading.

Our surveys in Calgary reinforce the perception that the prevalence data will depend on the availability of substances in one's community. The major substances used by the mentally ill may not be significantly different from those of the rest of the population, and the selective use by certain diagnostic groups (i.e., schizophrenia) of certain drugs (i.e., marijuana or stimulants) may be more related to larger urban centres' increased availability (28). The only universal finding may be a higher vulnerability to tobacco smoking in that population.

Special care must be exercised to differentiate between

the prevalence of symptoms and that of valid diagnostic categories. Diagnostic fads may also affect the perception of prevalence. This population is particularly sensitive to diagnostic "epidemics" of dissociative disorders, attention deficit and hyperactivity disorders, etc. (29).

Patients with concurrent disorders bring themselves to the attention of many services. A survey of the local impact on hospital emergencies, police arrests, school problems and burden on social services help shape the program to meet the local priority needs. Invariably, a program for concurrent disorders needs to optimize combined resources in the face of economic constraints. A cost-effective strategy for information dissemination to the public and professionals involved, as well as research services to ensure the evaluation of current experience and generation of new knowledge, are also required.

Creating the administrative/system sparks

From our consultative experience with several urban and rural settings in Canada, leadership may emanate from any segment or discipline within the network. It may also originate from the awareness of consumers and their families about their unmet needs. The survival of this leadership is enhanced if it resides with a small cadre of people ready to support each other in involving decision-makers while initial activities are designed, funding is sought, and public awareness is enhanced.

Drawing resources for the eventual coalition of services required is essential. Resources need not always be financial; it may be easier initially to enlist staff time. One source of funding in a multi-system network is likely to enable other involved parties to take a back seat and watch, delaying the active involvement required in the care of these patients.

Our experience argues in favor of starting perhaps with limited ambulatory care activities, while planning and further liaison meetings occur at regular intervals. Several ambitious projects never come to fruition despite their worthiness. The needs assessment will hopefully meet the anticipated concern about lack of "new" funds. Concurrent disorders patients currently utilize resources in an extensive but ineffectual manner. The choice is between the allocation of resources "by design" and their allocations "by default".

Customizing the framework for integration

In many areas of the world, integrated programs limit their target population to the long-term mentally ill, with a focus on case management. In Canada, with universal health insurance and no separate public and private sectors, our program targets a population of concurrent disorders encompassing the range of diagnoses and functioning. Services address a range of needs.

Assessment. A significant step is to ensure that the use of substances is recorded as part of any case history investigating a psychiatric disorder. A variety of valid and reliable screening instruments are available. Conversely, a mental status examination must be recorded as part of the history of any substance abusing/dependent individual. In our specialized program, the main intake instrument used is the Addiction Severity Index, which estimates the need for treatment along seven scales (alcohol, other substance use, as well as physical, work, family, legal and psychological assessments). These instruments require new psychometric validation when addressing a population with concurrent disorders (30,31). To help sort out the presenting symptoms and signs for the purpose of a differential diagnosis, their timing, the matching of the symptoms with the substance, the purpose of substance use, patterns of craving, family history and treatment response are of help (32-35). Sometimes gut feeling may initially have to suffice!

Prevention. The saying "an ounce of prevention is worth a pound of cure" is relevant in addressing the substance use of the mentally ill or the mental health of the substance abuser (4,36). Particularly for our young long-term mentally ill population, imbedding a prevention message about sensible or no substance use in a life skills module is recommended. Addiction programs should also incorporate awareness modules about mood or anxiety disorders. Those crossing the line from moderate drinking to problematic drinking can benefit from "five easy steps to sensible drinking", i.e., keep track, pace yourself, spend time on other things, stay alert, do not use alcohol to cope. Smoking prevention or anti-smoking education is increasingly being incorporated in prevention strategies. Staff awareness training at regular intervals is an important prevention component.

The range of interventions. Continuity of care is optimal for this complex population. Case management staffing level for the long-term mentally ill was initially recommended to be 1 in 8; economic constraints have increased this estimate to 1 in 18. A comprehensive care plan from an integrated team across the inpatient, day hospital and outpatient components of care is important. Initially, our day hospital provided our main therapeutic milieu and patients were referred there for 3-week periods most often renewed once. Our outpatient services provided a range of time-limited interventions on an individual, group or family basis and facilitated referral back to community resources. Our experience through the last decade has enabled us to increase the levels of treatment provided on an ambulatory care basis, based on our assessment of the patient's stage of change and level of engagement. We now offer time-limited (3-6 sessions) individual follow-up to those initially uncomfortable with a group experience; two psychoeducational sessions a week for those unable to attend more; three half-days for those at the contemplation stage and a fuller intensive outpatient (day hospital) for those at the action stage.

Patients with severe mental illness, mostly suffering

from schizophrenia and some from bipolar disorder, receive group support, meeting twice a week for one hour. The approach is both educational and supportive. The educational cycle is for 4 weeks (8 sessions) and mostly focuses on education about comorbidities and their integrated management as well as relapse prevention strategies. A comprehensive vocational and leisure assessment service is available as required and often results in referrals for workforce rehabilitation. Involvement of the family or of a significant other is valued. A selective couple therapy program based on O'Farrell's behavioral marital therapy model is provided as required (37). Once a week, a group discusses the opportunities presented by a range of mutual-help opportunities. For severe and persistent mentally ill, our program objective is stabilization. We resisted efforts to create a third system between mental health and addiction. Once stabilized, a process which can take a few months, the patient is referred back to the referring source.

The need for ongoing evaluation. There is no standard package for outcome evaluation. Ours was selected over 2 years. The need for a comprehensive package was balanced against the burden on the patient and system. Elements of the package may include (38): the Addiction Severity Index, which identifies the need for treatment across seven scales and has a briefer "follow-up" version useful for reassessments; the Treatment Services Review; the Psychosocial Functioning Inventory, a solid indicator of quality of life; the Socialization Scale, which identifies antisocial traits and personality; the Patient Requests (Lazare), which highlights the patients' perceptions of their needs; the Stages of Change, which identifies a person's position on the change cycle; the DSM-IV (diagnoses are reached using the Structured Clinical Interview for DSM-IV (SCID) for research or clinically through a team review). The recommended optimal follow-up schedule for patients is one year, with checks at discharge, 3, 6, and 12 month intervals.

The "hub and satellites concept". Not every location is required to have a comprehensive concurrent disorder program. An integrated centre with inpatient, day program and outpatient services as well as teaching and research components can become a cost-effective hub for a network of outpatient satellite teams in other locations.

CONCLUSIONS

In conclusion, while there are ample published North American strategies to design and implement a concurrent disorders program, there is also great latitude for creativity at a local level. Serendipity and the "art of the possible", in addition to needs assessments, have often guided our planning. This evolutionary review identifies the need for further investigation: a) it is hoped that the international experience in epidemiology and delivery of care for concurrent disorders will enrich the literature originating from the United States; b) broad practice guidelines exist focusing on the management of the severe and persistently mentally ill in a public health system; the next frontier is to fine tune these guidelines and accommodate them to gender and age differences, cultural differences, different systems of care delivery as well as the range of psychiatric disorders; c) clinical trials are required to better the integration of psychological and pharmacological interventions as well as the impact of mutual help; it is unfortunate that concurrent disorders are often an exclusion criterion for pharmacological trials; d) professional staff with a primary mental health or addiction background can train each other, complement each other's expertise and through close interaction will transcend each other's knowledge and attitudes to build a resource more attuned to the complex needs of the disorders involved; e) the study of concurrent disorders presents a renewed opportunity for reassessment of our current screening instruments and general understanding of the etiology, course and treatment of most psychiatric disorders.

Acknowledgement

The creative staff at the Addiction Centre and the contributions of Drs. Michael Krausz and Tarek Gawad for this publication are gratefully acknowledged.

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